

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY **REGION III** 1650 Arch Street

Philadelphia, Pennsylvania 19103-2029

FFB 2 0 2018

In Reply Refer To: 3AP20

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Kevin Smith **Environmental Compliance Specialist** Sunoco Partners Marketing & Terminals, L.P. 100 Green Street Marcus Hook, PA 19061

Dear Mr. Smith:

The United States Environmental Protection Agency, (EPA) Region 3 issued an approval for an alternative testing scenario to Sunoco Partners Marketing & Terminals, L.P. (Sunoco) on August 1, 2013 for six reciprocating internal combustion (RICE) compression ignition (CI) engines located at the Marcus Hook Refinery, located in Marcus Hook, PA (facility or site). The engines are used to power flood pumps that move large quantities of water at the facility during large rain events, preventing flooding of the facility and allowing access to pipe racks and cable trays at the site.

Each of the six engines is subject to 40 C.F.R. Part 63 Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (Subpart 4Z or RICE Rule), because each is a stationary RICE located at a major source of hazardous air pollutants (HAPs). Furthermore, even though the six engines operate only during heavy rains, they do not meet the definition of an "emergency stationary RICE" in accordance with an October 12, 2011 letter issued by EPA Region 1, Air Programs Branch, to the Massachusetts Water Resources Authority. In order to comply with the emissions standards in Subpart 4Z, Sunoco installed pollution reduction catalyst on each unit prior to the May 3, 2013 compliance date found at § 63.6595(a) for existing CI RICE.

The six engines were manufactured by Caterpillar, installed in 1994, and are arranged as three sets of two identical units, summarized below:

Designation	Horsepower (hp)/each engine	Pumping Capacity Gallons per Minute (GPM)
MP05-02 A & B	1745	23,500
MP05-04 A & B	2294	32,000
MP05-06 A & B	1184	42,650

Due to the sporadic and unpredictable nature of the operation of the engines based on rainfall, EPA's August 1, 2013 approval allowed Sunoco to implement the following testing protocol alternatives:

- 1. EPA will allow notification for the performance test to take place by phone and email as soon as Sunoco is aware of the possibility of completing a test, rather than the 60-day written notification of intent to test required at § 63.6645(g) and by the requirements of the General Provisions at § 63.7.
- 2. EPA will allow testing on one engine from each pair only, so long as Sunoco provides documentation to EPA demonstrating that each engine from each pair is identical to the other one from the pair. For the next required performance test, Sunoco should make the effort to test the other engine from the pair, in order to compile a full complement of performance tests for all six engines.
- 3. EPA will allow an extension of an additional 180 days to complete the performance testing in order to ensure rain event(s) heavy enough to allow testing on the engine sets. If after one year of the compliance date (May 3, 2014) there have not been enough rain events to complete testing on each engine, Sunoco shall contact EPA, Region 3 to discuss continuing the compliance period.
- 4. EPA will allow a shortened run of 15 minutes each, rather than the three (1) hour runs required in the rule. Sunoco should perform three test runs at 90% (or greater) of the design load for each engine being tested.

Following the testing alternatives 1-4 above, Sunoco completed its performance test on Engines -02A, -04B and -06A during a rain event on September 30, 2015; this test demonstrated compliance with the required emission limit of 23 ppm carbon monoxide (CO) at 15% oxygen (O₂). Subpart 4Z at § 63.6615 and Table 3 requires Sunoco to complete testing on the engines every three years (or 8760 hours of operation). In accordance with the 2013 Approval and by letter dated January 22, 2018¹, Sunoco requested approval of the same alternative testing protocol for the three untested engines, -02B, -04A and -06B by September 30, 2018. Sunoco provided updated operational info in February 2018 demonstrating that the cumulative annual operating hours (2014 to 2017) for all six engines varied between 185 and 655 hours, so testing every 3 years is the appropriate compliance schedule.

EPA Region 3 approves Sunoco's request as outlined above in Items 1-4 for engine units -02B, -04A and -06B. Please be aware that while the rule specifies a 3-year testing schedule, Sunoco may complete its test at any time within that 3-year window, meaning it can complete its test upon receipt of this approval.

The performance test protocol and final test reports will be submitted to EPA and Pennsylvania Department of Environmental Protection (PADEP) as required by Subpart 4Z, the General Provisions of 40 CFR Part 63, PADEP's rules and Sunoco's Title V Permit. Nothing in this approval alters the rules and requirements of Subpart 4Z as they apply to the Marcus Hook

¹ The letter also included a request for a waiver of EPA Test Methods. R3 referred Sunoco to the appropriate staff at EPA's Office of Air Quality Planning and Standards (OAQPS) for approval of the Test Method request. Mr. Smith indicated in a February 2, 2018 email that Sunoco would follow the Test Methods required by Subpart 4Z.

Marcus Hook facility or any other Sunoco Logistics site, for the subject fire pump engines and all other engines at this or other sites.

If you have questions or comments regarding this letter, please contact Erin Willard of the Office of Air Enforcement and Compliance Assistance at (215) 814-2152 or by email at Willard.ErinM@epa.gov.

Sincerely,

Cristina Fernandez, Director Air Protection Division

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